

CV of János Török

08.04.2019.

Personal data

Name	János Török
Position	Associate professor
Current institution	Department of Theoretical Physics, Budapest University of Technology and Economics H-1111 Budapest, Budafoki út 8, Hungary
e-mail	torok@phy.bme.hu
Phone	+36 1 463 41 07
Fax	+36 1 643 35 67
Date of birth	1972

Education

1996	MSc in Physics, Eötvös University Budapest
1997	MSc as French scientific translator, Eötvös University Budapest
1997	DEA de Dynamique des Fluides et des Transferts, Paris VI-Paris Sud
2000	PhD in Physics ("Shearing of granular materials") Budapest University of Technology and Economics

Employment

2012-	Associate professor	Department of Theoretical Physics, BME
2009-2011	Postdoctoral researcher	Computational and Statistical Physics Group, University Duisburg-Essen
2006-2009	Expert	Centre of Information Technology, BME
2003, 2005	Assistant professor	Department of Chemical Information Technology, BME
2004, 2006	Postdoctoral researcher	Computational and Statistical Physics Group, University Duisburg-Essen
2001-2002	Postdoctoral researcher	Department of Theoretical Physics, BME
2000-2001	Postdoctoral researcher	Weizmann Institute of Science, Israel

Awards and prizes

2014	'Teaching Excellence' award, (Faculty of Sciences, BME)
2017	Jánossy Lajos award, (Roland Eötvös Physical Society)
2018	'Teaching Excellence' award, (Faculty of Sciences, BME)

Research interest

- Rheology of dry granular materials: theory of quasistatic shear, effect of particle shape, critical state concept
- Fragmentation processes, collective abrasion
- Social networks: modeling society, big data analysis
- Opinion models

Teaching activity

- Theoretical Physics I, II (Mechanics, Electrodynamics, Quantum mechanics, Statistical physics)
- Computer simulations in physics
- Vector calculus

Students supervised

- MSc students: Alexandra Nagy (2015), Sára Lévy (2017)

Memberships and professional service

- Member of ELFT
- Referee of Physical Review, Entropy, JSTAT
- (2013) Member of the physics jury of the Hungarian National Science Foundation, OTKA

Grants, fellowships, projects

2013-2014	TAMOP FuturICT.hu Team leader
2004-2007	OTKA F47259 Principal investigator
2000-2001	Fellowship of the Feinberg Graduate School
1995-1999	Fellowship of the French government

Invited talks

2012	Committee for new railway construction standards (Hungary)
2008	Laboratoire de Physique de la Matière Condensée et des Nanostructures, Lyon
2004	Institut für Festkörperforschung, Forschungszentrum Jülich

Languages

English (master), French (master), German (intermediate)

Scientific impact (as of 08/04/2019)

35 papers in refereed journals

Total number of citations: 615

H-index: 14

Complete list of publications: <http://www.researcherid.com/rid/A-9944-2012>

Five selected publications

1. J Török, G Iñiguez, T Yasseri, MS Miguel, K Kaski, J Kertész, *Opinions, Conflicts and Consensus: Modeling Social Dynamics in a Collaborative Environment*, Physical Review Letters **110**, 088701 (2013).
2. J Török, T Unger, J Kertész, DE Wolf, *Shear zones in granular materials: Optimization in a self-organized random potential* Physical Review E **75**, 011305 (2007).
3. J Török, *Analytic study of clustering in shaken granular material using zero-range processes*, Physica A: Statistical Mechanics and its Applications **355**, 374-382 (2005).
4. Y Murase, J Török, HH Jo, K Kaski, J Kertész, *Multilayer weighted social network model*, Physical Review E **90**, 052810 (2014).
5. Y Kafri, E Levine, D Mukamel, GM Schütz, J Török, *Criterion for phase separation in one-dimensional driven systems*, Physical Review Letters **89**, 35702 (2002).